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Perlite

UNITED STATES DEPARTMENT OF THE INTERIOR

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Perlite

By Arthur C. Meisinger[1]

U.S. production of processed perlite increased 5% in quantity and value. Expanded perlite sales, however, decreased slightly in quantity with average value per short ton about the same as that of 1986. The quantity of processed perlite imported from Greece continued to slowly increase, primarily for use in expanding plants along the eastern seaboard. Construction-related uses for expanded perlite declined 10% but continued to account for most of the domestic perlite market with 66% of total sales.

Domestic Data Coverage.—Domestic production data for perlite are developed by the Bureau of Mines from two separate voluntary surveys, one for domestic mine operations and the other for plant operations. Of the 14 mining operations to which a request was sent, all responded; 13 were active, representing 100% of the total processed ore sold and used shown in table 1. Of the 66 expanding plants canvassed, 62 were active; of these, 39 plants, or 63%, responded, representing 50% of the total expanded perlite sold and used shown in table 1. Plant data for the 23 nonrespondents were estimated using reported prior-year production levels adjusted by trends in employment and other guidelines.

Table 1.—Perlite mined, processed, expanded, and sold and used by producers in the United States

(Thousand short tons and thousand dollars)

Year	Perlite mined[1]	Processed perlite					Expanded perlite		
		Sold to expanders		Used at own plant to make expanded material		Total quantity sold and used	Quantity produced	Sold and used	
		Quantity	Value	Quantity	Value			Quantity	Value
1983	608	293	9,942	181	5,722	474	387	385	63,500
1984	653	310	10,395	188	6,243	498	440	439	74,000
1985	678	309	10,714	209	6,821	518	461	459	81,000
1986	735	303	9,536	204	6,110	507	480	479	83,700
1987	778	333	10,471	200	6,023	533	464	466	81,800

[1]Crude ore mined and stockpiled for processing.

DOMESTIC PRODUCTION

Processed Perlite.—Perlite mined for processing from 13 operations by 12 companies in 6 Western States totaled 778,000 tons. New Mexico, with five mine operations, accounted for 86%. The remaining 14% came from Arizona, California, Colorado, Idaho, and Nevada.

Production of processed perlite sold and used increased 5% in quantity and value compared with that of 1986. New Mexico operations accounted for 82% of the U.S. total.

Ore producers were Guzman Construction Co.; Harborlite Corp.; Nord Perlite Co., a subsidiary of Nord Resources Corp., and Perlite Co., a subsidiary of Wonder Industries, in Arizona; American Perlite Co. in California; Persolite Products Inc. in Colo-

rado; National Perlite Co. in Idaho; Delamar Perlite Co. in Nevada; and Grefco Inc., Manville Products Corp., Silbrico Corp., and USG Corp. in New Mexico.

Expanded Perlite.—The quantity of expanded perlite produced by 62 plants in 32 States decreased slightly compared with that of 1986. Expanded perlite sales also decreased slightly in quantity. Leading States in descending order of sales were Mississippi, Pennsylvania, California, Georgia, Illinois, Florida, Kentucky, Virginia, Minnesota, Indiana, Alabama, and Texas. California and Texas each had seven active expanding plants.

Table 2.—Expanded perlite produced and sold and used by producers in the United States, by State

State	1986				1987			
	Quantity produced (short tons)	Sold and used			Quantity produced (short tons)	Sold and used		
		Quantity (short tons)	Value (thousands)	Average value per ton[1]		Quantity (short tons)	Value (thousands)	Average value per ton[1]
California	40,100	41,500	$7,696	$186	41,900	42,900	$7,922	$185
Florida	27,600	27,500	5,171	188	26,600	26,700	4,638	174
Indiana	19,800	19,200	4,932	256	21,000	21,400	5,186	243
Kansas	1,100	1,100	301	274	1,100	1,100	290	274
Massachusetts	2,000	2,000	644	329	2,200	2,000	714	361
Pennsylvania	W	W	W	W	47,800	47,800	8,801	184
Texas	22,500	21,900	5,033	230	18,300	19,100	4,582	240
Utah	1,300	1,300	350	260	1,900	1,900	575	306
Wisconsin	1,000	1,000	270	270	1,200	1,200	301	242
Other[2]	364,000	363,600	59,228	163	302,100	302,100	48,772	161
Total[3]	480,000	479,000	83,700	175	464,000	466,000	81,800	176

W Withheld to avoid disclosing company proprietary data; included with "Other."
[1]Average value based on unrounded data and rounded to nearest dollar.
[2]Includes Alabama, Arizona, Arkansas, Colorado, Georgia, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, New York, North Carolina, Oregon, Tennessee, Virginia, Wyoming, and data indicated by symbol W.
[3]Data may not add to totals shown because of independent rounding.

CONSUMPTION AND USES

Apparent domestic consumption of processed perlite increased nearly 5% to 563,000 tons compared with 537,000 tons in 1986. Domestic consumption of expanded perlite was slightly lower than that of 1986, primarily because of a decline in the roof-insulation board market. Construction-related uses for perlite decreased 10% to 306,200 tons. Expanded perlite used as fillers, filter aid, and for horticultural aggregate increased significantly and totaled 137,000 tons compared with 114,600 tons in 1986.

Table 3.—Expanded perlite sold and used by producers in the United States, by use

(Short tons)

Use	1986	1987
Concrete aggregate	7,700	7,600
Fillers	18,800	28,900
Filter aid	58,000	66,000
Formed products[1]	309,300	277,200
Horticultural aggregate[2]	37,800	42,100
Low-temperature insulation	2,500	3,500
Masonry and cavity-fill insulation	12,800	13,300
Plaster aggregate	8,700	8,100
Other[3]	23,800	19,300
Total	[4]479,000	466,000

[1]Includes acoustic ceiling tile, pipe insulation, roof insulation board, and unspecified formed products.
[2]Includes fertilizer carriers.
[3]Includes fines, high-temperature insulation, paint texturizer, refractories, and various nonspecified industrial uses.
[4]Data do not add to total shown because of independent rounding.

PRICES

The average price of processed perlite sold to expanders and used by captive expanders were $31.44 and $29.97 per ton, respectively. The average value of all processed perlite sold and used was $30.95 per ton compared with $30.86 per ton in 1986. The value of expanded perlite sold and used averaged $176 per ton compared with $175 per ton in 1986.

FOREIGN TRADE

Perlite exports, primarily to Canada, were estimated to be 35,000 tons compared with 30,000 tons in 1986. Imports of perlite ore from Greece were estimated to be 65,000 tons compared with 60,000 tons in 1986.

[1]Industry economist, Branch of Industrial Minerals.

Table 4.—Perlite: World production, by country[1]

(Thousand short tons)

Country[2]	1983	1984	1985	1986[p]	1987[e]
Australia[3]	3	4	[e]3	[e]3	4
Czechoslovakia[e]	[4]49	49	49	50	49
Greece	167	196	178	[e]190	190
Hungary[3]	103	[r]104	104	121	120
Italy[e]	83	88	88	80	80
Japan[e]	83	83	83	83	83
Mexico[3]	46	35	41	[e]40	40
New Zealand[3]	1	--	--	--	--
Philippines	2	17	4	[e]4	4
Turkey	32	67	[e]66	[e]66	66
U.S.S.R.[e]	660	660	660	660	660
United States (processed ore sold and used by producers)	474	498	518	507	[4]533
Total	1,703	[r]1,801	1,794	1,804	1,829

[e]Estimated. [p]Preliminary. [r]Revised.
[1]Unless otherwise specified, figures represent processed ore output. Table includes data available through June 3, 1988.
[2]In addition to the countries listed, Algeria, Bulgaria, China, Iceland, Mozambique, the Republic of South Africa, and Yugoslavia are believed to have produced perlite, but output data are not reported, and available information is inadequate for formulation of reliable estimates of output levels.
[3]Crude ore.
[4]Reported figure.

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